



L6 ANSWER 21 OF 40 CA COPYRIGHT 2006 ACS on STN
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TI Manufacture of high-strength **fly ash brick**
by self-ignited **sintering**
IN Zhang, Lihong; Cui, Yanhu; Zhang, Yongjin; Fu, Qiang; Xu, Henghai
PA First Steel-Smelting Industry General Plant, Angang Industry Development
Corp., Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 8 pp.
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DT Patent
LA Chinese
IC ICM C04B018-08
CC 58-6 (Cement, Concrete, and Related Building Materials)
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| PI | CN 1252393 / | A | 20000510 | CN 1998-114405 | 19981023 |
| | CN 1083406 | B | 20020424 | | |
| PRAI | CN 1998-114405 | | 19981023 | | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|------------|-------|------------------------------------|
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| CN 1252393 | ICM | C04B018-08 |
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| | ECLA | C04B033/13W4B |

AB The **brick** is composed of: **fly ash** 60-90,
western bentonite 5-20, and aggregate 5-20 weight%. The **brick** is
manufactured by: naturally dewatering the **fly ash** to
water content $\leq 23\%$, smashing the western bentonite to
 ≤ 0.088 mm, blending the aggregate (diameter = 1-5 mm, and 2-4 mm >
50%); mixing all raw materials; molding when **water** content <20%
to obtain unburned **brick**; drying the unburned **brick** at
>200° for > 20 h to **water** content <6%; and
sintering at 1050-1200° for ≥ 24 h. Preferably, the
flyash is high C **fly ash** with thermal value of
4000-5000 KJ/Kg; the aggregate is coal gangue slag or ironmaking slag; and
the molding is carried out by extruding at ≥ 2.5 MPa. The
brick has low cost and good performance.

ST **fly ash brick** self ignition
sintering; bentonite aggregate **fly ash**
brick

IT Drying